STANFORD UNIVERSITY
MEDICAL CENTER
PALO ALTO, CALIFORNIA

DEPARTMENT OF GENETI
School of Medicine

January 22, 1962

Dr. G.E.W. Wolstenholme
The CIBA Foundation
41 Portland Place
London, W.1, England

Dear Dr. Wolstenholme:

Thank you very much for your letter of 29 December - I must apologize for having been so tardy in answering it, but I have been away a good part of this month and I have been trying to formulate the most constructive reaction possible.

The idea of your Symposium on Biological Future of Man is a very intriguing one, and I would be honored and challenged to attempt to make some contribution to it. I am afraid I would have not very much to say about the impact of space research though perhaps even some brief cautionary remarks on this theme could be useful. There is the conceptually related problem in adaptation, to the overall expansion of human technological activity and its effect on the motivational structure of scientific work, but it is easier to sense some uneasiness about such a problem than to make useful comments on it. However, perhaps all of this need not be more than a point of departure for more general discussions, and I am sure you would not object if I were to join in on the discussion on the eugenical program. Unfortunately, intriguing as the program is, I do not think I can plan to participate if you are bound to have it as early as this November, as I have a number of other commitments on my schedule. If you should have other reasons to revise your plan so as to postpone the meeting until the following spring, I would be delighted to hear further from you about it.

Your Symposium is built on a most intriguing idea; I could only comment that it might be more effective if it concentrated somewhat more narrowly on man as a biological and social entity and did not attempt to bring in too much about his environment - for example, resources, polution or nutrition - except incidentally to some further remarks about the human condition.

You ask for some suggestions for names - two that I would very much like to see on the program despite any seeming incongruity are Albert Schweitzer and J.R. Oppenheimer. If I may also suggest some additional names of distinguished American scientists who could bring valuable merit to this kind of conference: Ernst Mayr and James F. Crow (evolution); Seymour Kety (neurophysiology and psychiatry); Hilary Koprowski (cell biology and virology). I would also add Paul Doty as an emminently knowledgable biochemist and as a member of the President's Scientific Advisory Committee bringing some experience in political science.

I realize that my indecision with respect to my availability next November may require that I forego a place as you complete your plans; I do hope, however, that you can remain in touch with me to give me as much time as possible for final irrevocable decision.

Sincerely,

P.S. The more I think of the tremendous impact that your projected symposium could have, the more strongly I feel that it should concentrate more narrowly on the biology of man, leaving his environment to another, probably equally extensive discussion. More particularly, I believe that the time is right for a restatement of the eugenic problem. Medawar's book "The Future of Man" and the critical discussions that have followed its appearance give some idea of the reawakening of interest in a "new eugenics". The excesses of the geneticism of thirty and forty years ago have led to an over-reaction which is only just beginning to subside. My own views on this subject differ somewhat from those of my colleagues - they are based to a large extent in my intuitive confidence in the rapid advance of the technology of genetic control. We should have some concern for the dysgenic evolution of the human species in the longer term. However, I am more concerned that we will wake up one morning very soon and discover that we have a powerful technique in our grasp long before we have faced the issues of the objectives to which it should be directed. For example, I would predict that it would not be more than ten or twenty years before we have the technical capability of imposing a stage of autogamy and homozygosity on the developing zygote or the germ line. This could permit an evaluation of the genotype, as opposed to phenotype, of an individual that would be the equivalent of many, many generations of rigorous selection against so named deleterious recessive mutations. This expectation leads me to discount the long range importance of the slow deterioration of the human genotype by almost any standard one would care to apply which must result from current practices of dysgenic selection and vulnerability to mutation.

If I were still to comment on the topic you had suggested for me, it might be on the theme that the impact of space on science tends to smack of devine revelation whether we think of the information that instruments or astronauts may relay from the planets or in the longer range of communication from other civilizations in the galaxy. But we can foresee discovery by revelation closer to Earth if we think of the computer as the deus ex machinae.

Itll ?